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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/736,413	FATULA, JOSEPH JOHN	
	Examiner	Art Unit	
	LIN LIU	2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7,9-13,16-20,22-25,30-33,35-39,42,44 and 46-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 7, 9-13, 16-20, 22-25, 30-33, 35-39, 42, 44 AND 46-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/2/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to communications filed on 01/21/2009.

2. Claims 1-5, 7, 9-13, 16-20, 22-25, 30-33, 35-39, 42, 44 and 46-52 are pending and have been examined.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/21/2009 has been entered.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. **Claims 1-5, 7 and 9-13** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With regard to **claim 1,** the instant claim is directed towards a sequence management apparatus for backing up data across a plurality of clients, the apparatus comprising a client request module, a sequence module, a package storage module, a packet retrieval module and a data assembly module, wherein all of modules could be

implemented in software alone as evidenced by the originally filed specification page 8, paragraph 32. Claim directed towards software alone is per se nonstatutory.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-5, 7, 9-13, 16-20, 22-25, 30-33, 35-39, 42, 44 and 46-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Beeler, JR. (publication no.: US 2004/0083245 A1)** in view of **Schutzman et al. (Patent no.: US 6,505,216 B1), Goddard (patent no.: US 6,883,110 B1)** and **Wahl et al. (patent no.: US 6,324,654 B1).**

With respect to **claim 1,** Beeler teaches a sequence management apparatus for backing up data across a plurality of servers (Beeler, fig. 5), the apparatus comprising:

a client request module configured to receive data to be backed up from a source server (Beeler, page 5, paragraphs 78-79, noted that the workstation 30 initiates the backup request from a source server to target servers);

a sequence module configured to generate a non-transparent sequence of a plurality of target servers (Beeler, page 6, paragraph 84, noted that the a list of available target servers are generated), wherein the non-transparent sequence is unique and

exclusively accessible to a global sequence manager (Beeler: page 6, paragraph 84-85, noted the list of available target servers); and

a packet storage module configured to store the data on the plurality of target servers according to the non-transparent sequence (Beeler, page 6, paragraph 91, and page 9, paragraph 121, noted that the data is backed up from the source server to target servers), wherein the source servers and the plurality of target servers are organized in a grid computing system (Beeler: fig. 5, page 2, paragraphs 15 & 19, noted the distributed processing system) wherein each physical distance between each target server is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter (Beeler: fig. 3 & 5, page 5, paragraph 77 and page 6, paragraphs 84-85. Since Applicant has not included an explicitly meaning of the "minimum" and "maximum" distance packet proximity parameter, the broadest interpretation of such terms are just any arbitrary distances between the servers that is reachable by other servers), and

a packet retrieval module configured to retrieve the plurality of backup data packets backed up on the plurality of target servers (Beeler, page 6, paragraph 92, restore request).

However, Beeler does not explicitly teach a method of performing data backup from a source client to a plurality of target servers, a method of performing data backup to plurality of the client computers according to a sequence order, and assembling the retrieved plurality of backup data packets in the sequence order, and a method of

measuring a distance value for remote data mirroring between the source and target systems in a unit selected from miles and kilometers.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the backup host client as taught by Schutzman in Beeler's invention to perform data backup from a client device to a plurality of target storage servers via a source server.

However, the combined method of Beeler-Schutzman does not explicitly teach a method of performing data backup to plurality of the client computers according to a sequence order, and assembling the retrieved plurality of backup data packets in the sequence order.

In the same field of endeavor, Goddard teaches a method of performing data backup to plurality of the client computers according to a sequence order (Goddard, figure 2, col. 4 line 60 to col. 5 line 13), and assembling the retrieved plurality of backup data packets in the sequence order (Goddard, fig. 5, col. 6, lines 12-27, noted that different portions of data is reconstructed and restored).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of reconstructing and restoring different portions of data from the target clients as taught by Goddard in the combined

method of Beeler's and Schutzman's invention in order to back up data due to server failure (Goddard, col. 6, lines 41-52).

However, the combined method of Beeler-Schutzman-Goddard does not explicitly teach a method of measuring a distance value for remote data mirroring between the source and target systems in a unit selected from miles and kilometers.

In the same field of endeavor, Wahl teaches a method of measuring a distance value for remote data mirroring between the source and target systems in a unit selected from miles and kilometers (Wahl: col. 23 line 55 to col. 24 line 23, noted that the user can specify the range from several hundred miles away or simply across the hall).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of allowing users to specify the location range in remote data mirroring system as taught by Wahl in the combined method of Beeler-Schutzman-Goddard's invention in order to allow the flexibility in specifying the location range of data mirroring.

With respect to **claim 2,** Beeler teaches the apparatus of claim 1, wherein the global profile management module configured to manage a metadata file, the metadata file descriptive of the data backed up on the plurality of target clients (Beeler, fig. 17, page 8, paragraph 105, noted the transaction log).

With respect to **claim 3,** Beeler teaches the apparatus of claim 2, wherein the metadata file is selected from the group consisting of a global client profile, a source

client profile, a source data record, a target data record, a data assembly record, and a global backup log (Beeler, fig. 17, page 8, paragraph 105, noted the transaction log).

With respect to **claim 4,** the combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of using a unique data identifier corresponding to the data to map the data to the source client, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data.

In the same field of endeavor, Goddard teaches a method of using a unique data identifier corresponding to the data to map the data to the source client, wherein the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data (Goddard, fig. 2, col. 4 line 59 to col. 5 line 13, noted the server data identifiers).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of server data identifiers as taught by Goddard in the combined method of Beeler's and Schutzman's invention in order to backup and restore data based on the server data identifiers (Goddard, col. 5, lines 5-13).

With respect to **claim 5**, the combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of mapping the unique data identifier to a second source client on which an identical copy of the data is stored.

In the same field of endeavor, Goddard teaches a method of mapping the unique data identifier to a second source client on which an identical copy of the data is stored. (Goddard, fig. 2, col. 4 line 59 to col. 5 line 13).

With respect to **claim 7,** Beeler teaches the apparatus of claim 6, wherein the packet retrieval module is further configured to retrieve the at least a portion of the data backed up on one of the plurality of the target clients according to the non-transparent sequence generated by the sequence module (Beeler, page 6 paragraph 92, and page 10 paragraph 131).

With respect to **claim 9,** Beeler teaches the apparatus of claim 1, wherein the packet storage module is further configured to separate the data into the plurality of backup data packets and to store the backup data packets on the plurality of target clients (Beeler, page 9, paragraph 113).

With respect to **claim 10,** Beeler teaches the apparatus of claim 9, further comprising a compression module configured to compress the data within the backup data packets prior to storing the backup data packets on the plurality of target clients (Beeler, page 9, paragraph 123, noted the compression algorithm used).

With respect to **claim 11,** Beeler teaches the apparatus of claim 9, further comprising an encryption module configured to encrypt the data within the backup data packets prior to storing the backup data packets on the plurality of target clients (Beeler, page 9, paragraph 123, noted the encryption algorithm).

With respect to **claim 12**, the combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of

creating a redundant backup data packet of at least one of the backup data packets prior to storing the backup data packets on the plurality of target clients.

In the same field of endeavor, Goddard teaches a method of creating a redundant data packet of at least one of the data packets prior to storing the data packets on the plurality of target clients (Goddard, col. 6, lines 41-52, noted the parity data).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of creating a parity data packet as taught by Goddard in the combined of Beeler and Schutzman in order to maintain data server integrity during data reconstruction (Goddard, col. 6, lines 41-52).

With respect to **claim 13**, the combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of storing the redundant backup data packet on one of the plurality of target clients.

In the same field of endeavor, Goddard teaches a method of storing the redundant data packet on one of the plurality of target clients (Goddard, fig. 6 and col. 6, lines 28-40).

Claim 16 lists all the same elements of **claim 1**. Therefore, the supporting rationale for the rejection to **claim 1** applies equally as well to **claim 16.**

With respect to **claim 17,** Beeler teaches all the limitations, except that he does not explicitly teach a method of performing data backup from a source client to a plurality of target servers.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers. (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the backup host client as taught by Schutzman in Beeler's invention to perform data backup from a client device to a plurality of target storage servers via a source server.

With respect to **claim 18,** Beeler teaches all the limitations, except that he does not explicitly teach a method of performing data backup to plurality of the client computers.

In the same field of endeavor, Goddard teaches a method of performing data backup to plurality of the client computers (Goddard, figures 1 and 2, col. 4 lines 1-17).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute the plurality of target clients as taught by Goddard in the combined method of Beeler's and Schutzman's invention in order to back up data to the plurality of client computers without adding additional storage devices to the source client/source (Goddard, col. 2, lines 7-15).

With respect to **claim 19,** Beeler a system for backing up data across a plurality of servers, the system comprising:

a network communications channel (Beeler, fig. 5, page 5, paragraph 75, LAN);

a source server connected to the network communications channel and configured to initiate a data backup operation (Beeler, fig. 5, page 5, paragraph 75, noted the source server 52);

a plurality of target servers connected to the network communications channel and configured to store at least a portion of the data (Beeler, fig. 5, page 5, paragraph 79, noted the target servers 54); and

a global sequence manager connected to the network communications channel and configured to store the data on the plurality of target servers according to a non-transparent sequence (Beeler, fig. 11, page 6, paragraphs 84-85), wherein the non-transparent sequence is unique and exclusively accessible to a global sequence manager (Beeler: page 6, paragraph 84-85, noted the list of available target servers), wherein the source servers and the plurality of target servers are organized in a grid computing system (Beeler: fig. 5, page 2, paragraphs 15 & 19, noted the distributed processing system) and each physical distance between each target server is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter (Beeler: fig. 3 & 5, page 5, paragraph 77 and page 6, paragraphs 84-85. Since Applicant has not included an explicitly meaning of the "minimum" and "maximum" distance packet proximity parameter, the broadest interpretation of such terms are just any arbitrary distances between the servers that is reachable by other servers), the global sequence manager further retrieving the plurality of backup data packets backed up on the plurality of target servers (Beeler, page 6, paragraph 92, restore request).

However, Beeler does not explicitly teach a method of performing data backup from a source client to a plurality of target servers, a method of performing data backup to plurality of the client computers according to a sequence order, and assembling the retrieved plurality of backup data packets in the sequence order, and a method of measuring a distance value for remote data mirroring between the source and target systems in a unit selected from miles and kilometers.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers. (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the backup host client as taught by Schutzman in Beeler's invention to perform data backup from a client device to a plurality of target storage servers via a source server.

However, the combined method of Beeler-Schutzman does not explicitly teach a method of performing data backup to plurality of the client computers according to a sequence order, and assembling the retrieved plurality of backup data packets in the sequence order.

In the same field of endeavor, Goddard teaches a method of performing data backup to plurality of the client computers according to a sequence order (Goddard, figure 2, col. 4 line 60 to col. 5 line 13), and assembling the retrieved plurality of backup

data packets in the sequence order (Goddard, fig. 5, col. 6, lines 12-27, noted that different portions of data is reconstructed and restored).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of reconstructing and restoring different portions of data from the target clients as taught by Goddard in the combined method of Beeler's and Schutzman's invention in order to back up data due to server failure (Goddard, col. 6, lines 41-52).

However, the combined method of Beeler-Schutzman-Goddard does not explicitly teach a method of measuring a distance value for remote data mirroring between the source and target systems in a unit selected from miles and kilometers.

In the same field of endeavor, Wahl teaches a method of measuring a distance value for remote data mirroring between the source and target systems in a unit selected from miles and kilometers (Wahl: col. 23 line 55 to col. 24 line 23, noted that the user can specify the range from several hundred miles away or simply across the hall).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of allowing users to specify the location range in remote data mirroring system as taught by Wahl in the combined method of Beeler-Schutzman-Goddard's invention in order to allow the flexibility in specifying the location range of data mirroring.

Claim 20 lists all the same elements of **claims 4 and 5**. Therefore, the supporting rationale of the rejection to **claims 4 and 5** applies equally as well to **claim 20**.

With respect to **claim 22,** Beeler teaches the system of claim 21, wherein the global sequence manager and subscription manager are further configured to track a source storage allocation parameter of the source client (Beeler, page 7, paragraph 95).

With respect to **claim 23,** Beeler teaches the system of claim 21, wherein the global sequence manager and subscription manager are further configured to track a target storage allocation parameter of each of the plurality of target clients (Beeler, page 6, paragraph 94).

With respect to **claim 24,** Beeler teaches the system of claim 21, wherein the global sequence manager and subscription manager are configured to track a resource allocation parameter (Beeler, pages 6-7, paragraphs 94-95).

With respect to **claim 25,** Beeler teaches the system of claim 24, wherein the resource allocation parameter is selected from the group consisting of a network allocation parameter, a client processor parameter, and a client bandwidth parameter (Beeler, pages 6-7, paragraphs 94-95).

In regard to **claim 30,** the limitations of these claims are substantially the same as those in claim 1. Therefore the same rationale for rejecting claim 1 is used to reject claim 30. By this rationale **claim 30** is rejected.

In regard to **claim 31,** the limitations of these claims are substantially the same as those in claims 2 and 3. Therefore the same rationale for rejecting claims 2 and 3 is used to reject claim 31. By this rationale **claim 31** is rejected.

In regard to **claim 32,** the limitations of these claims are substantially the same as those in claim 9. Therefore the same rationale for rejecting claim 9 is used to reject claim 32. By this rationale **claim 32** is rejected.

In regard to **claim 33,** the limitations of these claims are substantially the same as those in claim 4. Therefore the same rationale for rejecting claim 4 is used to reject claim 33. By this rationale **claim 33** is rejected.

In regard to **claim 35,** the limitations of these claims are substantially the same as those in claims 24 and 25. Therefore the same rationale for rejecting claims 24 and 25 is used to reject claim 25. By this rationale **claim 25** is rejected.

With respect to **claim 36,** Beeler teaches a method for backing up data across a plurality of servers, the method comprising:

requesting data to be backed up from a source client (Beeler, fig. 5, page 6, paragraph 91);

receiving data to be backed up from a source server (Beeler, page 5, paragraphs 78-79, noted that the workstation 30 initiates the backup request from a source server to target servers);

separating the data into a plurality of backup data packets (Beeler, page 9, paragraph 113);

generating a non-transparent sequence of a plurality of target servers (Beeler, page 6, paragraph 91, and page 9, paragraph 121, noted that the data is backed up from the source server to target servers), wherein the non-transparent sequence is unique and exclusively accessible to a global sequence manager (Beeler: page 6, paragraph 84-85, noted the list of available target servers);

storing the backup data packets on the plurality of target servers according to the non-transparent sequence (Beeler, page 6, paragraph 91, and page 9, paragraph 121, noted that the data is backed up from the source server to target servers), wherein the source servers and the plurality of target servers are organized in a grid computing system (Beeler: fig. 5, page 2, paragraphs 15 & 19, noted the distributed processing system) and wherein each physical distance between each target server is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter (Beeler: fig. 3 & 5, page 5, paragraph 77 and page 6, paragraphs 84-85. Since Applicant has not included an explicitly meaning of the "minimum" and "maximum" distance packet proximity parameter, the broadest interpretation of such terms are just any arbitrary distances between the servers that is reachable by other servers);

managing a metadata file descriptive of the data backed up on the plurality of target servers (Beeler, fig. 17, page 8, paragraph 105, noted the transaction log);

tracking a resource allocation parameter, wherein the resource allocation parameter is one of a source storage allocation parameter, a target storage allocation

parameter, a network allocation parameter, a client processor parameter, and a client bandwidth parameter (Beeler, pages 6-7, paragraphs 94-95); and

managing a contractual subscription of the source server and the plurality of target servers (Beeler, fig. 11, page 6, paragraph 88).

retrieve the plurality of backup data packets backed up on the plurality of target servers (Beeler, page 6, paragraph 92, restore request).

However, Beeler does not explicitly teach a method of performing data backup from a source client to a plurality of target servers, a method of performing data backup to plurality of the client computers according to a sequence order, and assembling the retrieved plurality of backup data packets in the sequence order, and a method of measuring a distance value for remote data mirroring between the source and target systems in a unit selected from miles and kilometers.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the backup host client as taught by Schutzman in Beeler's invention to perform data backup from a client device to a plurality of target storage servers via a source server.

However, the combined method of Beeler-Schutzman does not explicitly teach a method of performing data backup to plurality of the client computers according to a

sequence order, and assembling the retrieved plurality of backup data packets in the sequence order.

In the same field of endeavor, Goddard teaches a method of performing data backup to plurality of the client computers according to a sequence order (Goddard, figure 2, col. 4 line 60 to col. 5 line 13), and assembling the retrieved plurality of backup data packets in the sequence order (Goddard, fig. 5, col. 6, lines 12-27, noted that different portions of data is reconstructed and restored).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of reconstructing and restoring different portions of data from the target clients as taught by Goddard in the combined method of Beeler's and Schutzman's invention in order to back up data due to server failure (Goddard, col. 6, lines 41-52).

However, the combined method of Beeler-Schutzman-Goddard does not explicitly teach a method of measuring a distance value for remote data mirroring between the source and target systems in a unit selected from miles and kilometers.

In the same field of endeavor, Wahl teaches a method of measuring a distance value for remote data mirroring between the source and target systems in a unit selected from miles and kilometers (Wahl: col. 23 line 55 to col. 24 line 23, noted that the user can specify the range from several hundred miles away or simply across the hall).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of allowing users to specify the

location range in remote data mirroring system as taught by Wahl in the combined method of Beeler-Schutzman-Goddard's invention in order to allow the flexibility in specifying the location range of data mirroring.

In regard to **claim 37,** the limitations of these claims are substantially the same as those in claim 1, but rather in a computer code stored in a computer storage medium form. Therefore the same rationale for rejecting claim 1 is used to reject claim 37. By this rationale **claim 37** is rejected.

In regard to **claim 38,** the limitations of these claims are substantially the same as those in claims 2 and 3. Therefore the same rationale for rejecting claims 2 and 3 is used to reject claim 38. By this rationale **claim 38** is rejected.

In regard to **claim 39,** the limitations of these claims are substantially the same as those in claim 4. Therefore the same rationale for rejecting claim 4 is used to reject claim 39. By this rationale **claim 39** is rejected.

In regard to **claim 42,** the limitations of these claims are substantially the same as those in claim 9. Therefore the same rationale for rejecting claim 9 is used to reject claim 42. By this rationale **claim 42** is rejected.

In regard to **claim 44,** the limitations of these claims are substantially the same as those in claims 10-13. Therefore the same rationale for rejecting claims 10-13 is used to reject claim 44. By this rationale **claim 44** is rejected.

In regard to **claim 46,** the limitations of these claims are substantially the same as those in claim 1. Therefore the same rationale for rejecting claim 1 is used to reject claim 46. By this rationale **claim 46** is rejected.

With respect to **claim 47,** Beeler teaches the client of claim 17, the client backup manager further creates a redundant backup data packet for each backup data packets prior to storing the backup data packets on the plurality of target clients (Beeler, page 5, paragraphs 78-79, noted that the workstation 30 initiates the backup request from a source server to target servers); and stores the redundant backup data packet on one of the plurality of target servers according to the non-transparent sequence (Beeler, page 6, paragraph 91, and page 9, paragraph 121, noted that the data is backed up from the source server to target servers).

However, Beeler does not explicitly teach a method of performing data backup from a source client to a plurality of target servers and a method of using a unique data identifier corresponding to the data to map the data to the source client, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

However, the combined method of Beeler-Schutzman does not explicitly teach a method of using a unique data identifier corresponding to the data to map the data to the source client, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data.

In the same field of endeavor, Goddard teaches a method of using a unique data identifier corresponding to the data to map the data to the source client, wherein the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data (Goddard, fig. 2, col. 4 line 59 to col. 5 line 13, noted the server data identifiers).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of server data identifiers as taught by Goddard in the combined method of Beeler's and Schutzman's invention in order to backup and restore data based on the server data identifiers (Goddard, col. 5, lines 5-13).

In regard to **claims 48-52,** the limitations of these claims are substantially the same as those in claim 47. Therefore the same rationale for rejecting claim 47 is used to reject claims 48-52. By this rationale **claims 48-52** are rejected.

Response to Arguments

8. Applicant's arguments with respect to claims 1-5, 7, 9-13, 16-20, 22-25, 30-33, 35-39, 42, 44 and 46-52 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIN LIU whose telephone number is (571)270-1447. The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on (571)-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Lin Liu/
Examiner, Art Unit 2445

/Patrice Winder/
Primary Examiner, Art Unit 2445